

Native Warm Season Grasses

Tennessee Department of Agriculture, Division of Forestry



Native warm season grasses (NWSG), including eastern gama, sideoats gama, big bluestem, little bluestem, Indiangrass and switchgrass, greatly benefit quail, turkey, meadow larks and some songbirds. Tall clumps with bare ground between make NWSG excellent brooding and nesting habitat for turkey and quail. Eastern gama, big bluestem and switchgrass produce twice the yearling steer weight gain of fescue.

NWSG complement cool season pastures because they grow vigorously in the heat of summer. Warm and cool season grasses must be grown in separate areas. During summer, NWSG yield twice the tonnage of cool season forages, and are ready to cut during better haying weather (late June to mid-July). Late haying also benefits nesting birds. NWSG are resistant to endophyte fungus, and they need little or no fertilizer for good performance.

Pre-Planting. *For no-till into existing turf:* cut hay or graze close in September, kill with 1-2 quarts Roundup per acre, controlled burn. Re-spray in spring with ½ to 1 quart Roundup if needed. The herbicide "Plateau", available only through Quail Unlimited, is highly effective. Seed with no-till drill ¼" deep. Insecticide treatment a week after planting will reduce disease transmission. Row crop fields can also be no-till seeded. *For conventional preparation:* control competing vegetation, especially grassy weeds, plow, disk and cultipack. Fertilization: do not add N, except for log landings, roads and other depleted sites, where 200-250 lbs./ac 12-24-24 or the equivalent is recommended. Bring P and K up to moderate if needed.

Seed selection: Germination rates can vary widely. Test germination by placing seed in wet paper towels in plastic bags, or buy seed based on Pure Live Seeds (PLS) specifications. Minimum lbs./ac PLS planting rates for grazing (drilled & broadcast, respectively): **switchgrass** 7, 9; **big bluestem** 8, 10; **Indiangrass** 7, 10; **eastern gamagrass** 8 (drill only). For wildlife, rates can be reduced to 5, 7, 7 and 7

lbs./ac respectively. Species can and should be mixed, as long as coverage is complete.

Planting: Conventional equipment can be used to plant switchgrass (alfalfa box) and eastern gamagrass (corn planter). Drill ¼" deep. Big and little bluestem and Indiangrass seeds are too fluffy for conventional drills. Ordering de-bearded or brushed seed may help but problems are still likely. Tennessee Wildlife Resources Agency can provide specialized drills. If for some reason one is not available, use a drop spreader or cyclone spreader to broadcast the seed, then drag to cover it. If using a cyclone spreader for bluestems and Indiangrass, install a special agitator. A carrier of cracked corn or fertilizer will help. A granular soil legume inoculant is a good carrier for switchgrass. Cultipack after seeding. Don't worry about covering all the seed. Plant in May or June.

Management: Mow initial weeds back to 6" stubble when they reach 15-18". Keep them mowed back to 10-12" during July. Quit mowing in late July to allow root system to develop. Don't mow NWSG seedlings themselves. Flash grazing for 1-2 days is an option. Do not graze full time until NWSG are over 15" tall. Do not graze lower than 8". Burn to control weed grasses and brush and improve wildlife habitat value. Burn in late winter, taking proper precautions. Maintain a 12' firebreak around field, (either disked ground or a strip of cool-weather pasture). Get a permit from the Forestry Division. Burn ¼ to 1/3 of the stand each year, and burn entire pastures to encourage uniform grazing. Brooding habitat is good the first year after burning; years 2 and 3 are good for nesting. Plant legumes with NWSG to benefit birds.

For more information contact UT Extension Service, Tennessee Wildlife Resources Agency, Quail Unlimited (423-470-0009) or the NRCS

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